
U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

Gordon P. Eaton, Director

Reston, VA 20192

For information, contact:

Joyce Ober, Commodity Specialist

Telephone: (703) 648-7717, Fax: (703) 648-7722

E-mail: jober@usgs.gov

MINES-DATA: (703) 648-7799

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.er.usgs.gov/minerals>

SULFUR IN DECEMBER 1996

During the month, production of combined Frasch and recovered elemental sulfur was 897,000 metric tons, according to the U.S. Geological Survey. December production was 7% higher than that of November 1996, and slightly lower than that of December 1995. Shipments of these combined products were 11% higher than those of November 1996.

Import and export data for December 1996 were not available at the time of publication. Import/export data and apparent consumption for December 1996 will be published in the January 1997 Sulfur Mineral Industry Surveys. Imports of recovered sulfur for November 1996 were 152,000 tons.

Exports of sulfur, for the same period, were 59,000 tons. Imports of sulfuric acid for November 1996 were 223,000 tons; exports were 10,000 tons.

Official trade data issued by U.S. Bureau of the Census indicated imports of elemental sulfur for the last few months are significantly higher than any time in the past. The listed sources for the material are not normally countries that export sulfur to the United States; the data are being verified. Until the inquiry is complete, U.S. import data for elemental sulfur will be adjusted by USGS to correspond to historic trends.

TABLE 1
SALIENT SULFUR STATISTICS 1/

(Thousand metric tons)

Period	Production				Shipments, all sources
	Frasch 2/	Petroleum 3/	Natural gas	Total	
1995: Jan. -Dec.	759	5,020	4,580	10,400	10,700
December	W	443	460 4/	903	917
1996:					
January	W	433	449 4/	882	884
February	W	406	419 4/	825	815
March	W	430	424 4/	854	835
April	W	449	423 4/	872	898
May	W	467	422 4/	889	863
June	W	416	397 4/	813	763
July	W	433	427 4/	860	832
August	W	468	432 4/	900	917
September	W	440	401 4/	841	872
October	W	466	412 4/	878	885
November	W	481	354 4/	835	858
December	W	484 p/	413 p/ 4/	897 p/	949 p/
Year to date	W	5,370 p/	4,970 p/	10,300 p/	10,400 p/

p/ Preliminary. W Withheld to avoid disclosing company proprietary data; included with "Natural gas."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Estimates based on information available from the Texas Comptroller of Public Account and company quarterly reports.

3/ Includes a small quantity from coking operations.

4/ Includes data from Frasch producers.

TABLE 2
U.S. IMPORTS OF SULFUR 1/

(Thousand metric tons and thousand dollars)

Period	Canada		Mexico		Total, all countries 2/	
	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/
1995	1,670	65,000	502	28,900	2,200	99,700
Jan.-Nov. 1995	1,560	60,400	462	26,500	2,020	92,300
1995:						
November	151	5,250	38	1,970	189	7,510
December	116	4,020	40	1,800	174	6,870
1996:						
January	96	4,780	18	781	135	7,070
February	96	4,140	37	1,910	150	7,080
March	93	2,480	37	1,720	130	4,680
April	82	2,220	37	1,990	119	4,660
May	119	2,400	37	1,280	171	5,520
June	85	1,500	36	1,760	122	3,780
July	111	4,610	36	1,680	148	6,700
August	80	1,590	57	2,510	157	4,910
September	59	1,390	58	2,470	135	4,410
October	92	2,170	19 e/	826	111 r/ e/	3,000 r/
November	81	1,740	40	1,750	152 e/	4,580
Year to date	994	29,000	412	18,700	1,530	56,400

e/ Estimated. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May include other countries not listed.

3/ Declared customs valuation.

Source: Bureau of the Census; as adjusted by U.S. Geological Survey.

TABLE 3
U.S. IMPORTS OF SULFURIC ACID 1/

(Thousand metric tons and thousand dollars)

Period	Canada			Europe			Total 2/		
	Quantity	Sulfur content	Value 3/	Quantity	Sulfur content	Value 3/	Quantity	Sulfur content	Value 3/
1995	1,660	544	61,500	95	30	710	1,900	619	66,500
Jan.-Nov. 1995 4/	1,550	509	57,600	95	30	710	1,780	582	61,600
1995:									
November	136	45	4,900	10	3	116	147	48	5,060
December	133	44	4,260	--	--	--	139	45	5,280
1996:									
January	112	37	3,420	9	3	113	144	47	4,120
February	110	36	2,700	11	4	232	188	62	3,550
March	144	47	3,900	35	12	466	199	65	4,510
April	126	41	3,620	40	13	421	202	66	4,350
May	147	48	3,990	20	7	223	192	63	4,510
June	113	37	2,670	21	7	160	140	46	3,460
July	106	35	2,770	21	7	86	132	43	3,210
August	127	41	3,260	11	3	176	138	45	3,620
September	156	51	3,760	19	6	70	195	64	4,160
October	144	47	3,690	--	--	--	161	53	3,890
November	166	54	3,900	10	3	79	223	73	4,330
Year to date	1,450	474	37,700	197	65	2,030	1,920	626	43,700

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May include other countries not listed.

3/ Declared customs valuation.

4/ May include revisions to prior months.

Source: Bureau of the Census.

TABLE 4
U.S. EXPORTS OF SULFUR AND SULFURIC ACID 1/

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric Acid		
	Quantity	Value 2/	Quantity	Sulfur content	Value 2/
1995	905	66,200	171	56	12,800
Jan.-Nov. 1995	846	65,100	156	51	12,000
1995:					
November	51	3,690	11	4	1,050
December	99	5,340	6	2	774
1996:					
January	102	7,600	13	4	1,370
February	82	7,080	6	2	805
March	66	1,590	10	3	900
April	120	6,720	7	2	938
May	15	2,330	9	3	1,080
June	124	4,990	8	3	785
July	62	3,160	9	3	978
August	139	7,280	12	4	1,090
September	36	1,910	12	4	1,080
October	92	3,760	12	4	1,440
November	59	3,510	10	3	869
Year to date	897	49,900	108	35	11,300

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Declared f.a.s. (free alongside ship) valuation.

Source: Bureau of the Census.

TABLE 5
U.S. CONSUMPTION OF SULFUR 1/

(Thousand metric tons)

Period	Domestic sources 2/	Imports	Consumption
1995	9,830	2,200	12,000
Jan.-Nov. 1995	8,990	2,020	11,000
1995:			
November	854	189	1,040
December	818	174	992
1996:			
January	780	135	915
February	733	150	883
March	769	130	899
April	778	119	897
May	848	171	1,020
June	639	122	761
July	770	148	918
August	778	157	935
September	836	135	971
October	793	111 r/ e/	904 r/
November	799	152 e/	951
Year to date	8,520	1,530	10,100

e/ Estimated. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Calculated as shipments minus exports.

TABLE 6
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT 1/

(Thousand metric tons)

District and source	December 1996 p/		November 1996 p/		Year to date 1996 p/		Year to date 1995 2/	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	21	21	14	14	217	7,730	245	238
Natural gas	4	4	4	4	51	51	50	50
Total	25	25	18	18	267	276	295	288
PAD 2:								
Petroleum and coke	89	89	80	79	927	925	904	899
Natural gas	4	4	4	4	50	49	58	58
Total	93	93	84	83	977	975	962	957
PAD 3: 3/								
Petroleum and coke	289	285	264	254	3,140	3,110	2,870	W
Natural gas 4/	312	366	290	324	3,860	3,920	4,250	W
Total	601	651 5/	554	578 5/	7,000	7,030 5/	7,120	7,430 5/
PAD 4 and 5: 6/								
Petroleum and coke	85	89	124	126	1,090	1,100	1,030	1,030
Natural gas	94	90	56	55	1,010	992	999	994
California	66	69	71	72	828	834	800	804
Total	179	179	180	180	2,100	2,090	2,030	2,030
Grand total	897	949	835	858	10,300	10,400	10,400	10,700

p/ Preliminary. W Withheld to avoid disclosing company proprietary data.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May include revisions to prior months.

3/ Includes Puerto Rico and the U.S. Virgin Islands.

4/ Frasch production is included in the natural gas production to avoid disclosing company proprietary data.

5/ Includes data from Frasch producers.

6/ Quantities produced and shipped in California included in petroleum and natural gas. California total shown for information purposes only.

TABLE 7
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS 1/

(Million metric tons per year [annualized basis] and dollars per metric ton for period shown)

	1996			1995
	December	November	Year to date	Total
Production	10.60 p/	10.20	10.30	10.40
Shipments	11.20 p/	10.50	10.40	10.70
Exports of sulfur	NA	0.72	0.98	0.91
Imports of sulfur:				
Canada	NA	0.99	1.09	1.67
Mexico	NA	0.49	0.45	0.52
Total	NA	1.85	1.67	2.20
Exports of H ₂ SO ₄	NA	0.12	0.12	0.17
Imports of H ₂ SO ₄ :				
Canada	NA	2.03	1.58	1.66
Europe	NA	1.85	1.67	2.20
Total 2/	NA	0.12	0.12	0.17
Consumption: 3/				
Domestic sources	NA	9.75	9.31	9.83
Imports	NA	1.85	1.67	2.20
Total	NA	0.12	0.12	0.17
Sulfur export values 4/	NA	59.00	56.00	73.00
Sulfur import values: 4/				
Canada	NA	\$22	\$29	\$39
Mexico	NA	\$44	\$45	\$58
Average	NA	\$30	\$37	\$45
H ₂ SO ₄ export values 4/	NA	87.00	105.00	75.00
H ₂ SO ₄ import values: 4/				
Canada	NA	\$24	\$26	\$37
Europe	NA	\$8	\$10	\$7
Average	NA	\$19	\$23	\$35

p/ Preliminary. NA Not available.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes other countries not listed.

3/ Because trade data was not available, December consumption was not determined.

4/ Average value per ton for most recent data available.